

# NASA Global Change Master Directory (GCMD) Keyword Review Feedback Package

#### I. Overview

This keyword package provides the following: (1) Instructions for completing the keyword review; (2) Background information on the GCMD Keywords; (3) Timeline for completing the keyword review; (4) Contact information if there are additional questions; (5) Keyword Review Questionnaire; and (6) Spreadsheet of proposed GCMD keywords to review with the existing keywords (for cross reference). Having an independent review of the GCMD keywords will ensure the quality and scientific integrity of the keyword hierarchy.

## II. Instructions for Completing the Review

- **1.** Review the background information on the GCMD keywords (section III below).
- **2.** Review the keyword proposal spreadsheet; refer to the existing keywords spreadsheet (for cross-reference) if needed (spreadsheet appended).
- **3.** Complete the keyword review questionnaire for each keyword (new/update) being reviewed (appendix 1).
- **4.** Email your completed questionnaire for each keyword to the ESDIS Standards Office (ESO).

# III. Background Information on the GCMD Keywords

The GCMD Keywords are a hierarchical set of controlled Earth Science vocabularies that help ensure Earth science data and services are described in a consistent and comprehensive manner and allow for the precise searching of collection-level metadata and subsequent retrieval of data and services. Initiated over twenty years ago, the GCMD Keywords are periodically analyzed for relevancy and will continue to be refined and expanded in response to user needs. The sets of GCMD Keywords are as follows.

- Earth Science
- Earth Science Services
- Data Centers
- Projects
- Instruments/Sensors
- Platforms/Sources
- Locations



- Horizontal Data Resolution
- Vertical Data Resolution
- Temporal Data Resolution
- URL Content Types
- Chronostratigraphic Units

The GCMD Keywords are organized using a multi-level hierarchical structure. This hierarchical structure provides a framework by which concepts can be classified and related. The Earth Science and Science Services keyword sets use the following hierarchical structure:

Category > Topic > Term > Variable Level 1 > Variable Level 2 > Variable Level 3 > Detailed Variable

Categories and Topics represent disciplines and high level concepts. Terms and Variables define subject areas and parameters. Detailed Variables are uncontrolled values that can be added by users to more specifically describe data. All other keyword sets use hierarchies designed for a specific concept. For example, "Instruments" uses *Short Name > Long Name*. Short name and long name define the name of the instrument used to acquire the data.

#### **Earth Science Keyword Structure**

The Earth Science Keywords have a six-level keyword structure with the option for a seventh uncontrolled field. Category and Topic levels define how the keywords are organized and the associated Earth science discipline within the hierarchy. The Term and Variables levels define the subject area, measured variables/parameters, and the hierarchical-type relationship for the subject area.

Keyword Level	Example
Category	Earth Science
Topic	Atmosphere
Term	Weather Events
Variable Level 1	Subtropical Cyclones
Variable Level 2	Subtropical Depression
Variable Level 3	Subtropical Depression Track
Detailed Variable	(Uncontrolled Keyword

Additional information about the GCMD Keywords can be found on the GCMD Keyword landing page at <a href="https://earthdata.nasa.gov/about/gcmd/global-change-master-directory-gcmd-keywords">https://earthdata.nasa.gov/about/gcmd/global-change-master-directory-gcmd-keywords</a>.



# I.V. Timeline for Completing the Review

The keyword review questionnaire should be completed for each keyword being reviewed and emailed to the NASA ESDIS Standards Office (ESO) at <a href="mailto:eso-staff@lists.nasa.gov">eso-staff@lists.nasa.gov</a> within two weeks of the review start date.

### **V. Contact Information**

For questions regarding the keyword review, please contact the NASA ESDIS Standards Office (ESO) at eso-staff@lists.nasa.gov.

For specific questions on the keywords being proposed, please contact the GCMD Science Coordinators at <a href="mailto:GSFC-GCMDUSO@mail.nasa.gov">GSFC-GCMDUSO@mail.nasa.gov</a>.



# **Appendix 1: Keyword Review Questionnaire**

The keywords to review are in the appended spreadsheet and convey (1) the proposed science keywords (new, update, delete) within the keyword hierarchy, (2) the number of records affected in the CMR by the keyword change; and (3) the keyword definition/reference. The proposed changes were compiled by the GCMD science coordinators with input from the science community. Please use the questionnaire below to provide your feedback on the keywords.

Review Date:
Name:
Contact information:
Keyword Being Reviewed:
Questions:
Is the keyword suitable in characterizing the data associated with a particular science discipline?
□ No □ Yes Explain:
Is the keyword suitable as a search term within the given hierarchy?
□ No □ Yes Explain:
Do you have any recommendations for alternatives to the keyword being proposed?
□ No □ Yes Explain:
Do you have any recommendations for additions to the keyword being proposed?
□ No □ Yes Explain:



Do you have any recommendations for changes to existing keywords (either the keyword or placement in the keyword hierarchy)?
□ No □ Yes Explain:
Do you have any recommendations for keyword deletions?
□ No □ Yes Suggestions:
Please include any other comments or suggestions that you'd like to share regarding the proposed keyword changes.



# **Appendix 2: GCMD Keyword Summary Spreadsheet**

The spreadsheet conveys the proposed science keywords version 8.5 (new/updated keywords) and the existing science keywords version 8.4.1. for cross-reference.

See appended Excel spreadsheet.